

Site Identification Report

**Shahdam Khail Dara, Knadia Valley
District Kohistan Upper**



UNDP's GLOF-II Project

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Site Identification Report

Shadam Khail Dara, Kandia Valley, Tehsil Kandia, District Kohistan Upper

Introduction to Kandia Valley

Consisting of 5 Union Councils (UCs), Kandia Valley is a Tehsil of District Kohistan Upper. According to the Census Report 2017, population of the valley is 84055 persons spread over an area of 2088 KM². The valley is a combination of sub valleys sharing boundaries with Swat, Dir, Gilgit-Baltistan and Shangla Districts of Khyber Pakhtunkhwa province in Pakistan. The whole valley has 66 small and medium size villages¹ and 20 Banda Jaat. A road is bifurcated towards the valley from the main Shahrah-e-Karakoram towards the valley. The valley is linked with KKH through a bridge on Indus River. The main road is constructed along the river side that was washed away in 2010 floods. The people are living in houses made of mud, stone and huge quantity of timber. The valley is lacking civics facilities are depending upon agriculture and forest resources. The people of the area on both sides of the rivers are connected with each other through small bridges made of wood and stone². 80% of the timber income is the major source of livelihood for the communities.



Introduction to Sahadam Khail Dara

Shahdam Khail Gabrial is a sub valley in Kandia starting from Kuz Gabrial and end at Kunari Banda. Jeep-able track has been constructed by the people of the area to get connected to the main Kandia Valley. As in case of main Kandia Valley, the people of this sub valley i.e Shahdam Khail Gabrial are living on both sides of the main river flowing to main river of Kandia

further going into River Indus. Shahdam Khail Gabrial Dara is consists of 5 Village Councils (VCs) including Shahadam Khail Gabrial, Mula Khail, Eshpidar-Maidan, Meher Shahi, Badigo and Nakawo in UC Gabrial. The valley has a population of

¹ See Annex-I for List of Villages in Kanadia Valley of District Kohistan Upper

² See Annex-II for List of Bridges in Kandia Valley of District Kohistan

15000 persons approximately. No civics facility is available for schooling or treatment in majority of the communities residing in the valley. Education ratio in this narrow valley is negligible. The people are using unhygienic water for drinking where sanitation facilities are unknown in the area. The valley itself and the communities in it are connected through small bridges. A road from the main Kandia road is bifurcated towards the valley near _____. Like other areas of the valley the people this sub valley are residing on river sides.

People of the area are depending upon agriculture and majority of them are living below poverty line. The people are living mostly in one room houses with kitchen inside the home. Local people are primarily farmers or tenants. They also rear livestock. Beside potatoes, turnip and maize are the main crops of the area. Walnuts, grapes, plums, peaches, persimmons, apricots, almond and pine-nuts (*Chalghoza*) are found in the valley. Vegetable like tomato, onion, radish, turnip, onion and cabbage are also grown in the area. Some people collect medicinal plants and morels and sell it in local markets, thus earning their livelihood. The people also get their share in forest revenues from the government. During winter (September, October, December, January and February) season all activities stops due to heavy snow fall. A negligible number of people are in government jobs. The people of the valley are divided in 7 social clans including Shadam Khail in majority followed by Mula Khail, Gujars, Sui Khail, Gular Khail, Shahbaz Khail and Gusht Khail. In addition some families from Swat have also migrated to the area. Youth are the more in numbers in the area. Majority of the people are owners of large lands. Few persons with disability, widows and orphans are also living in the valley.

Government facilities in the valley

The area is neglected in past. The only jeep-able narrow road has been constructed by the people of the area after it was destroyed by the devastating floods in 2010. There are 21 Government Primary Schools for boys and 02 for Girls, 03 Middle Schools for Boys and 01 High School for 5 VCs of UCs Gabrial³. There is only one Civil Dispensary (CD) at Karang for the total population of the valley.

Communal/Social Infrastructure

Almost all of the communities and individuals are generating electricity for themselves through Micro Hydel Power Generators. The only link road from start to the end of the valley has not only been rehabilitated by the locals after the July 2010 floods but also they regularly maintain it. The water supply schemes and small bridges are also maintained by the communities themselves. The people of comparatively big villages have formed there Jirgas consist of 40 to 50 people to resolve and mediate in local social, cultural and other issues and to negotiate with government and other stakeholders mostly on forest and timber related issues. Each of the community has its own mosque.

³ See Annex-III for List of Primary Schools in Shahdam Khail Dara

Major disasters in the Valley

A focus group discussion with the local people reveals that a massive flood occurred around 100 years ago that washed each and every thing in the valley. This was followed by devastating floods in July 2010. Effects of the July 2010 floods are very much visible across the valley. Major damages have occurred to the people living near the rivers. 70% Agriculture land along the rivers sides have been washed away. The people said that 312 vehicles of different types, 11 government buildings including schools and health facility, 22 mosques, 400 houses, 250 MHPs, 250 shops, more than 50 small bridges and 100% of the link roads were dispersed. The floods killed 8 people in the valley. The floods also took away hundreds of thousands cubic feet of valuable timber.

The area is regularly experiencing flash floods of moderate degree every year after the July 2010 floods. The people also observe landsliding in the many parts of the valley that damage and block the only track. Have snow fall, heavy rains and earthquakes have been observed by the people of Shadam Khail Dara.

Post July 2010 floods interventions

According to the local people, the government and non governmental organization provided relief items and food commodities after the July 2010 floods. The people mentioned that many of them have lost their houses but no support has been extended yet by the government or any other entity. The only narrow road and a number of bridges and MHPs have been rehabilitated by the locals themselves.

Situation Analysis

According to the locals the area is experiencing unusual behavior of weather in the valley. The local informed that July 2010 floods were generated due to rains across the valley. The locals have observed that after 2010 each year the river bank erosion is occurring during the flood season, which not only eroded the infrastructures

like roads and shops and electricity pools etc. but also recessed the productive arable land of these subsistence agrarian communities. The local also informed that quantity of waters is increasing the main river and its tributaries.

As per discussion with locals, majority of the people use timber in construction of residential and commercial buildings. People from upper part of the valley used to migrate in late August of early September and come back in late April or early May each year. The people staying in cold weather uses a huge quantity of wood for heating that affect the local forest. Main Shadam Khail River is the outcome of many small and large tributaries. Almost all of the communities, access roads and government buildings are located near the streams and rivers within the valley. Forest cutting at large scale was observed in the valley. A local mentioned that around 2 M Cft ready for sale timber is stored since many years. The farmers and landowners are growing crops for domestic use only. Majority of the people are illiterate where their health conditions were not looking good.

Vulnerability context of the Valley

The elements at risk in the Valley are people, property, infrastructure, environment, systems, present in hazard zones are subject to potential losses. The expected risks may damage population, buildings, crops, roads, bridges, essential facilities, forest and crop land.

The risk and hazards will effect almost 100% of the population including women and men, if occurred. These people residing in these houses near the rivers and big stream size have their agriculture lands, Animal Shelters, Mosques, Shops and government buildings like schools, Dispensary and BHU of the valley are prone to damages in case of flash floods.



Majority of the communities have single access roads with no alternate access in case of any emergency. Most of the people are getting electricity from Micro Hydral Powerhouses (MHP) managed by the locals are mostly located inside or by side of the main rivers and large streams. Thus much of these powerhouses are prone to floods. As the locals have experienced natural hazards already, they are of the opinion that the floods damage agriculture land. The people told that floods usually occurs in the months of June, July and August that most of the time damage the standing crop. The floods also affect the forest and barren cultivable waste lands.



Shahadm Khail Dara is surrounded by high mountains. There are several lakes in the valley including 01 lake in Sal Jheel, 01 in Glacier Dhand, 03 in Mula Khail and 2 in Shadam Khail Dara. The locals informed that all of the lakes have glaciers on the top of it. They added that aged people have observed GLOF events in their age. A group of community people counted the glaciers existed in the surrounding of the valley that include the 02 glaciers at Gabrial Shaahdam Khail, 01 at the top of Berti, 01 in the area of Swato Banr, 01 in Aneel, 01 in Somi and 01 in Koyi Banr. They have observed that glaciers are squeezing in size.

The main river of Shadam Khail Dara is the outcome of different small and medium size tributaries including Breti Khwar originated from Banr Dara, Rachawo Khwar coming from Rachawo Dara and Gabrial Khwar, Baar Khwar, Khamar Khwar, Banrr Khwar, Koyi Band Khwar, Somi Dara Khwar and Zahar Dara Khwar mostly originated from Mahodand and back of Andrab valley in GB.

Findings

- Majority of the people in the valley are aware that temperature in the area has been increased that is resulting in melting of snow and glaciers rapidly.
- The communities of Kandia Valley in general and all of the people living on river sides in Shahdam Khail Dara in particular are very much

vulnerable and prone to floods.

- Rehabilitation of crop land washed out by July 2010 floods is not yet done and the people have lost up to 70% of their agriculture land.
- Cultivation of Cash Crops particularly the Off-Season Vegetable is much attractive for locals as compare to forest resources thus encroachment in meadows was observed
- Huge quantity of timber is used for construction and heating by the locals on annual basis.
- The local told that hazards like 1. Floods, 2. Landslides, 3. Earthquakes, 4. Snow fall and 5. Glacial Avalanches have been observed
- No hazards mapping is available at any level
- No alert system is existed in the valley
- Irrigation channels in most of the areas are out of order
- Streets and pathways in villages and small hamlets are uneven
- Majority of the government facilities are located in hazardous areas.
- Timber in most of the area fallen by heavy snow and the wind are laying in forest and main streams' sides.
- The locals informed that 2 Million Cft ready for sale timber is waiting for sale for more than ten years.
- The locals have 80% share in the timber income.
- Telenor is the only available means of communication but in far areas there is no communication means.
- Children, women, elderly people and disables will be the worst effectees in case of any misshape.
- Very basic facilities like potable drinking water, schools and health facilities were not found in most of the villages in the valley.

Suggestions/Recommendations/Opinions

- The Valley is comprising of a large area having risks of different natures that needs detail Disaster Assessment and Risk Mapping in the area
- No formal structure for Disaster Management and Disaster Risk Reduction is available actually, thus Institutional arrangement for collection and dissemination of information regarding hazards is required
- Awareness creation, mobilization, organization and capacity building of communities in disaster preparedness and management may result in minimizing the affects of disasters and associated risks
- Increasing resilience of communities through strengthening the social capital and rehabilitating or reconstructing the communal infrastructure may help to manage disaster in more efficient ways and

thus to reduce its impact

- Introduction of environment friendly construction material and fuel efficient cooking and heating technologies can help to minimize burden on forest resources
- Policy level intervention with forest department to collect the fallen wood may result in generation of revenue for local communities that can be spent for disaster preparedness if the communities are properly mobilized and organized.
- Improvement of access roads to communities and construction of resistant bridges may help a large number of people to move easily
- Indigenous knowledge and intelligence needs to be explored, used and promoted to mitigate the losses and affects of disasters and hazards
- Early Warning/Emergency Alert System may help the people to escape safely in case of any emergency or occurrence of floods
- Alternate source of energy and livelihood can ensure forest protection
- Plantation, Construction of Check Dams and Protection Walls will make the area resistant
- Approval and implementation of Working Plan for marking and fallen timber collection will provide the local people with enough money that can be used for individual and community needs.
- Awareness and training on Non-Timber Forest Produced (NTFPs) and Medicinal & Aromatic Plants (MAPs) can help the locals to have alternate source of energy
- Fully equipped emergency response unit is needed to keep the local people aware and updated about any expected hazards and to provide assistance to people in case of emergencies.

Annex-I

List of Villages in Kandia Valley

- | | | |
|-------------------------------|------------------------------|----------------------------------|
| 1. Naat Bel | 23. Segal | 45. Bebloo |
| 2. Tothi | 24. Banr -I | 46. Richawoo-II |
| 3. Kol | 25. Banr-II | 47. Barigo-II |
| 4. Zango | 26. Aneel-I | 48. Meher Shahi |
| 5. Kangolo | 27. Aneel-II | 49. Meher Shatu |
| 6. Ezgil | 28. Sumi | 50. Karai |
| 7. Barigo | 29. Serai Maidan | 51. Eshpidar |
| 8. Danish | 30. Tothi Dara | 52. Pati |
| 9. Kath | 31. Mula Khail Maidan | 53. Bagh Serai |
| 10. Karung | 32. Hanari | 54. Jabba |
| 11. Dung | 33. Kot Gil | 55. Kuz Gabrial |
| 12. Nakawo | 34. Nat Bel-II | 56. Shahdam Khail Gabrial |
| 13. Shingoyee | 35. Tothi-II | 57. Swato Banda |
| 14. Kanoyee | 36. Tor | 58. Bar-II |
| 15. Pitawo Rachawo | 37. Aleel | 59. Zambail-I |
| 16. Kuz Sehgal | 38. Sapar | 60. Koti Banr |
| 17. Bar Segal | 39. Juchdi | 61. Kot Maidan |
| 18. Garai-II | 40. Behero | 62. Maira Shahdam Khail |
| 19. Gatloo | 41. Jamrawo | 63. Bari Baig |
| 20. Narawo | 42. Zambil-II | 64. Got Soyi Khail Maidan |
| 21. Serai | 43. Birti | 65. Zahar Dara |
| 22. Mula Khail Gabrial | 44. Karhus | 66. Shanglo Kot |
| 67. | | |

Annex-II

Names of Bridges in Shahdam Khail Dara of Kandia Valley

- 1.** Bridge at Kot Gil
- 2.** Bridge at Naat Bel
- 3.** Bridge at Tothi
- 4.** Bridge at Aleel
- 5.** Bridge at Tor
- 6.** Bridge at Ser
- 7.** Bridge at Jachwe
- 8.** Bridge at Ezgil
- 9.** Bridge at Kath
- 10.** Bridge at Berti
- 11.** Bridge at Karang
- 12.** Bridge at Karas
- 13.** Bridge at Kanvi-I
- 14.** Bridge at Kanvi-II
- 15.** Bridge at Belo
- 16.** Bridge at Bruj
- 17.** Bridge at Rachawo
- 18.** Bridge at Segal
- 19.** Bridge at Barigo
- 20.** Bridge at Mohar Shahi
- 21.** Bridge at Karai
- 22.** Bridge at Serai
- 23.** Bridge at Kotlo
- 24.** Bridge at Eshpidar
- 25.** Bridge at Narawoo
- 26.** Bridge at Bridge at Ser-I
- 27.** Bridge at Pati
- 28.** Bridge at Mula Khail Gabrial
- 29.** Bridge at Bagh Serai
- 30.** Bridge at Jabba
- 31.** Bridge at Segal
- 32.** Bridge at Shahdam Khail Gabrial (03 Bridges)
- 33.** Bridge atKuz Gabrial
- 34.** Bridge at Banr
- 35.** Bridge at Swato Banr
- 36.** Bridge at Baro (2 Bridges)
- 37.** Bridge at Aneel (12 Bridges)
- 38.** Bridge at Koyi Banr
- 39.** Bridge at Somi
- 40.** Bridge at Anbeel
- 41.** Bridge at Maidan (5 Bridges)
- 42.** Bridge at Sumi Dara (7 Bridges)

Annex-III

List of Government Buildings in Shahdam Khail Valley of Kandia, District Kohistan

A. Government Primary School for Boys

- 1.** Government Primary School Gabrial
- 2.** Government Primary School Karang
- 3.** Government Primary School Kanai
- 4.** Government Primary School Kuz Gabrial-I
- 5.** Government Primary School Band Gabrial
- 6.** Government Primary School Dong
- 7.** Government Primary School Mula Khail Gabrial (6 Schools)
- 8.** Government Primary School Shahdam Khail
- 9.** Government Primary School Somi
- 10.** Government Primary School Kuz Segal
- 11.** Government Primary School Eshpidar (02 Schools)
- 12.** Government Primary School Barai (02 Schools)
- 13.** Government Primary School Rachawo
- 14.** Government Primary School Belo

B. Government Primary School for Girls

- 1.** Government Girls Primary School Kuz Gabrial
- 2.** Government Girls Primary School Eshpidar

C. Government Middle School for Boys

- 1.** Government Middle School Gabrial
- 2.** Government Middle School Karang
- 3.** Government Middle School Badigo

D. Health Facilities

- 1.** Civil Dispensary (CD) Bagh Serai
- 2.** Basic Health Unit (BHU) Karang

E. Other Facilities

- 1.** Rest House at Karang